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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,406	01/14/2004	Tatsuya Tomioka	247532USOXDIV	2626

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1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

BUTTNER, DAVID J

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/756,406

Applicant(s)

TOMIOKA ET AL.

Examiner

David Buttner

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-10 and 21-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 6-10, 21-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 9-926828.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

The lined out references on the 1449 form were not provided. The publication numbers listed on the 1449 form do not match the publication numbers on the documents provided. The abstracted references provided by applicant are clearly irrelevant to the claims under examination.

Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence(s) of the specification or in an application data sheet by identifying the prior application by application number (37 CFR 1.78(a)(2) and (a)(5)). If the prior application is a non-provisional application, the specific reference must also include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-10,21-25,27,28,30 and 31 rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukahara EP 417775 in view of JP07025798.

Tsukahara exemplifies (#3,4) blends of polycarbonate and fatty acid monoglyceride for optical uses. The polycarbonate is based on BPA and has a low

amount –OH termination. The MW is about 15,000. Tsukahara does not report the amount non BPA phenolic impurities present when polymerizing the polycarbonate.

JP07025798 discloses a method of purifying BPA that is especially suitable for making polycarbonates in optical applications (see paragraph 2; abstract). Applicant (page 21 line 18) admits this reference's purification is the preferred method to reduce the non BPA phenolics.

It would have been obvious to employ polycarbonate derived from BPA purified by the technique of JP07025798 as the polycarbonate in Tsukahara's composition. Improved optical properties would be expected.

Claims 6-10 and 21-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukahara EP 417775 in view of JP07025798 in further view of Okamoto '653.

The Tsukahara/JP07025798 combination suggests the inclusion of phosphorous antioxidants (page 4 line 28 of EP417775), but not the amounts thereof. Okamoto (table 1) shows 50ppm of antioxidant is typical for optical polycarbonate compositions. It would have been obvious to include such an amount of antioxidant in Tsukahara's composition.

Claims 6-10 and 21-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto '653 in view of JP07025798.

Okamoto exemplifies digital video substrates of polycarbonate, antioxidant and release agent. The MW of the polycarbonate is about 14,000. The polycarbonate has zero (or near zero) amounts of –OH endgroups, because "both" terminals have been

endcapped with monophenols (col 4 line 33). Okamoto does not report the amount non BPA phenolic impurities present when polymerizing the polycarbonate.

JP07025798 discloses a method of purifying BPA that is especially suitable for making polycarbonates in optical applications (see paragraph 2; abstract). Applicant (page 21 line 18) admits this reference's purification is the preferred method to reduce the non BPA phenolics.

It would have been obvious to employ polycarbonate derived from BPA purified by the technique of JP07025798 as the polycarbonate in Okamoto's composition. Improved optical properties would be expected.

Claims 6-10,21-25,27,28,30 and 31 rejected under 35 U.S.C. 103(a) as being unpatentable over Sakoda '799 in view of JP07025798.

Sakoda exemplifies optical disc substrates of polycarbonate having a low amount of -OH termination (table 1). Fatty acid monoglycerides can be added (col 4 line 67). The polycarbonate is purified to remove unreacted components prior to molding (col 3 line 36). Sakoda does not report the amount non BPA phenolic impurities present when polymerizing the polycarbonate.

JP07025798 discloses a method of purifying BPA that is especially suitable for making polycarbonates in optical applications (see paragraph 2; abstract). Applicant (page 21 line 18) admits this reference's purification is the preferred method to reduce the non BPA phenolics.

It would have been obvious to employ polycarbonate derived from BPA purified by the technique of JP07025798 as the polycarbonate in Sakoda's composition. Improved optical properties would be expected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 571-272-1084. The examiner can normally be reached on weekdays from 10 to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Buttner

DAVID J. BUTTNER
PRIMARY EXAMINER

7/6/05

